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U.S. DEPARTMENT OF COMMERCE NOAA, NATIONAL WEATHER SERVICE

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

TO: NATIONAL WEATHER SERVICE (W/OH12x1)
HYDROMETEOROLOGICAL INFO CENTER
1325 EAST-WEST HIGHWAY, RM 7116
SILVER SPRING, MD 20910

HSA OFFICE: Marquette, MI

REPORT FOR (MONTH/YEAR):

November 2015

DATE: January 4, 2015

SIGNATURE:

Robin J. Turner, MIC

Justin Titus, Meteorologist

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41).



An X inside this box indicates no flooding occurred within this Hydrologic Service Area.

November Flooding

No flooding was reported to the National Weather Service.

November Precipitation

While north central Upper Michigan saw near to below normal liquid equivalent precipitation, the rest of Upper Michigan saw near to above normal precipitation. As for snowfall, all of Upper Michigan received below to well below normal amounts.

Below is a chart of some of the larger cities in the Upper Peninsula, with monthly precipitation in inches, the amount of inches above or below normal for the month and any applicable record high or low rank.

Location	Precipitation	Above/Below	Rank	Snow	Above/Below	Rank
WFO Marquette	2.15	-1.03		6.7	-17.7	6 th
Marquette City	2.27	-0.35		1.0	-9.9	5 th
Houghton Airport	2.48	0.35		No Data	No Data	
Ironwood	5.36	2.66		12.4	-12.1	
Iron Mountain	2.89	0.95		2.0	-3.9	
Manistique	3.89	1.42		0.2	No Data	
Munising	4.54	0.80		6.0	-7.0	
Newberry	4.03	No Data		3.1	No Data	

Other monthly precipitation totals from coop observers:

Location	Precipitation	Snow
	(inches)	(inches)
Ahmeek 1SW (Keweenaw County)	3.61	10.4
Amasa (Iron County)	2.58	2.3
Atlantic Mine (Houghton County)	4.33	17.5
Baraga 7NW (Baraga County)	2.22	9.3
Big Bay (Marquette County)	3.32	12.1
Chatham (Alger County)	3.41	6.9
Clarksburg (Marquette County)	2.33	3.4
Cooks (Schoolcraft County)	4.17	0.7
Copper Harbor (Keweenaw County)	3.36	Missing
Garden Corners (Delta County)	3.70	0.4
Gladstone (Delta County)	3.74	0.2
Greenland 6N (Ontonagon County)	3.34	7.9
Gwinn (Marquette County)	Missing	Missing
Harvey (Marquette County)	2.93	Missing
Herman (Baraga County)	3.31	13.9
Houghton (Houghton County)	2.85	8.7
Jacobsville (Houghton County)	2.90	8.6
Mohawk (Keweenaw County)	Missing	Missing
Menominee (Menominee County)	2.39	0.4
Norway (Dickinson County)	3.68	1.8
Paulding (Ontonagon County)	3.21	9.3
Stambaugh (Iron County)	2.59	3.7

Drought Discussion

The November 24, 2015 release of the U.S. Drought Monitor indicated that drought conditions ranged from D1 (Moderate Drought) over north central portions of Upper Michigan to no drought in areas closer to Lake Michigan. For the latest drought status, please go to http://www.drought.gov.

November Temperatures

Below is a table of some of the larger cities in the Upper Peninsula, with average monthly temperature and number of degrees above or below normal for the month, and the rank of an all-time warmest or coldest month, where applicable.

Location	Temperature	Above/Below	Rank
	(degrees)		
WFO Marquette	36.5	6.2	4 th
Marquette City	40.3	5.5	6 th
Houghton Airport	38.1	6.7	4 th
Ironwood	35.9	6.1	10 th
Iron Mountain	37.7	5.7	8 th
Manistique	38.6	4.2	
Munising	38.5	4.5	7 th
Newberry	38.9	6.4	5 th

November River Levels

According to the United States Geological Survey, November average streamflow was normal (25-75 percentile) across most of Upper Michigan.

November Products Issued

30 – Daily River and Lake Summary

30 – Hydrologic Summary

1 – Hydrologic Outlook